Crouzet CD12S

Crouzet Millenium 3 CD12S 24 VDC Controller User Manual

1. Introduction

This user manual provides comprehensive instructions for the installation, operation, and maintenance of the Crouzet Millenium 3 CD12S 24 VDC controller. The Millenium 3 CD12S is a compact, programmable logic controller designed for various industrial and building automation applications. Please read this manual thoroughly before attempting to install or operate the device to ensure safe and efficient use.

2. Safety Information

Always observe the following safety precautions to prevent personal injury and damage to the equipment:

- Installation and maintenance should only be performed by qualified personnel.
- Ensure the power supply is disconnected before making any electrical connections or performing maintenance.
- Verify that the power supply voltage matches the device specifications (24 VDC).
- Protect the device from moisture, dust, and extreme temperatures.
- Do not operate the device if it appears damaged.
- Adhere to all local and national electrical codes.

3. Product Overview

The Crouzet Millenium 3 CD12S is a versatile 24 VDC controller, part of the Millenium 3 range, known for its compact design and robust performance. It features a display for status indication and user interaction, along with various input and output terminals for connecting to sensors and actuators.

Figure 3.1: Front view of the Crouzet Millenium 3 CD12S 24 VDC controller, showing the display, control buttons, and terminal blocks.

Figure 3.2: The official Crouzet brand logo.

4. Setup and Installation

4.1 Mounting

The Millenium 3 CD12S controller is designed for DIN rail mounting. Ensure the mounting surface is stable and free from excessive vibration. Allow adequate space around the unit for ventilation and wiring access.

4.2 Wiring

All wiring must comply with local electrical codes and the device's specifications. Refer to the detailed wiring diagrams provided with the product packaging or available from the manufacturer's website for specific connection points.

- **Power Supply:** Connect a stable 24 VDC power source to the designated power terminals. Observe

polarity.

- **Inputs:** Connect sensors and input devices to the digital input terminals (I1, I2, etc.).
- **Outputs:** Connect actuators and output devices to the transistor output terminals (Q1, Q2, etc.). Ensure the load current does not exceed the specified maximum per output.

4.3 Initial Power-Up

After all connections are securely made and verified, apply power to the controller. The display should illuminate, indicating the device is operational. The controller will typically run the last programmed application.

5. Operating Instructions

5.1 Programming

The Millenium 3 CD12S controller is programmed using Crouzet's dedicated software, typically Millenium 3 Soft. This software allows users to create ladder logic or function block diagrams to define the controller's behavior. Connect the controller to a computer via the appropriate programming cable (sold separately) to upload or download programs.

5.2 Display and Navigation

The integrated display provides real-time status information and allows for basic parameter adjustments. Use the navigation buttons (A, B, ESC, +, -) to scroll through menus, view input/output states, and modify settings as defined in the application program.

- **ESC:** Used to exit menus or cancel operations.
- **OK:** Used to confirm selections or enter menus.
- **+/-:** Used to navigate through options or adjust values.
- **A/B:** Functionality depends on the user's application program.

6. Maintenance

The Crouzet Millenium 3 CD12S controller requires minimal maintenance. Regular checks can help ensure its longevity and reliable operation.

- **Cleaning:** Periodically clean the exterior of the device with a soft, dry cloth. Do not use abrasive cleaners or solvents. Ensure no dust or debris accumulates in the ventilation slots.
- **Connection Checks:** Routinely inspect all wiring connections to ensure they are secure and free from corrosion.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges to prevent damage.

7. Troubleshooting

If the controller is not functioning as expected, consider the following troubleshooting steps:

- **No Power/Display Off:** Verify the 24 VDC power supply is connected correctly and is active. Check for blown fuses in the power circuit.
- **Incorrect Output Behavior:** Review your application program for logic errors. Check the wiring of the

output device and ensure it is receiving the correct voltage and current.

- **Input Not Responding:** Check the wiring of the input sensor. Verify the sensor is functioning correctly and providing the expected signal type (e.g., NPN, PNP).
- **Communication Issues:** If experiencing problems connecting to the programming software, ensure the correct cable is used and drivers are installed. Check the communication port settings.
- **System Error Message:** If an error message appears on the display, consult the Millenium 3 programming software documentation or the manufacturer's support resources for specific error code interpretations.

If problems persist, contact Crouzet technical support.

8. Specifications

Specification	Value
Manufacturer	Crouzet
Part Number	88970042
Item Model Number	88970042
Product Dimensions	19.69 x 19.69 x 11.02 inches
Item Weight	7.4 ounces
Power Supply	24 VDC
Batteries Included	No
Item Package Quantity	1
ASIN	B003A69TSK

9. Warranty and Support

Warranty information for the Crouzet Millenium 3 CD12S controller is typically provided at the point of purchase or included with the product documentation. For detailed warranty terms and conditions, please refer to your purchase agreement or contact your supplier.
For technical support, additional documentation, or service inquiries, please visit the official Crouzet website or contact their customer service department. Ensure you have your product model number (CD12S) and part number (88970042) available when seeking support.